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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Amendment of the Commission's
Rules to Establish New Personal
Communications Services

) GEN Docket No. 90-314
) ET Docket No. 92-100
)
) RM-7140, RM-7175, RM-7617,
) RM-7618, RM-7760, RM-7782,
) RM-7860, RM-7977, RM-7978,
) RM-7979, RM-7980
)
)
)

COMMENTS OF COX ENTERPRISES, INC.

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EXECUTIVE SUMMARY

Cox Enterprises, Inc. ("Cox") submits that PCS presents an historic opportunity for the Commission to begin to inject competition into the last bastion of monopoly telecommunications -- the local loop. Broadband cable television infrastructure makes possible the offering of a truly portable residential telecommunications service alternative. Cox's PCS experiments verify that such a service is technically feasible.

Cox agrees that the Commission should license a number of PCS providers consistent with efficient spectrum utilization. However, because PCS spectrum is congested with wideband microwave users, many of whom cannot be relocated, each PCS provider needs a minimum 40 MHz block of spectrum plus the ability to call on reserve spectrum if it can demonstrate that it is severely spectrum constrained.

Licensing PCS on a Major Trading Area basis best balances the advantages and disadvantages associated with too large and too small licensing areas. Cox opposes the suggestion that PCS markets be licensed on a non-uniform basis. Whatever market size is selected, it is important that each PCS operator start out on an equal footing.

There are strong public policy reasons not to permit LECs or LEC cellular affiliates to participate in PCS as licensees within their telephone service areas. The Commission's goal in these proceedings should be to create competitive alternatives to the existing local loop monopoly. Further, any award of PCS spectrum to a LEC as a set aside or to relieve LECs from existing cellular

separate subsidiary obligations would undermine the potential for competition offered by PCS.

Cox favors comparative hearings as the best mechanism to ensure a qualified applicant is selected in the licensing process. If lotteries nevertheless are used for PCS licensing, rigorous standards should be applied to ensure that applicants are qualified and committed to providing service. Postcard lotteries would encourage speculation and tax the Commission's administrative resources with a flood of post-grant transfer applications and would not put licenses into the hands of those best qualified to provide service.

PCS will require fair, unbundled and cost-based interconnection with the public switched telephone network. Because of the uncertainty still surrounding many aspects of PCS licensing, the Commission should not preempt state regulation at this time.

Finally, the Commission has an important role to play in standard setting. Cox believes that uniform standards among PCS providers and compatibility with unlicensed PCS devices are critical to developing interfaces, interoperability and roaming among service providers. The Commission should set an expeditious timetable for establishment of standards and adopt standards if the industry does not achieve consensus.

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COMMENTS OF COX ENTERPRISES, INC.

Cox Enterprises, Inc. ("Cox"), by its attorneys, hereby submits its comments on the Commission's Notice of Proposed Rulemaking and Tentative Decision to establish Personal Communications Services ("PCS").^{1/}

I. INTRODUCTION

Cox is a broadly diversified company with significant interests in cable television, radio and television broadcasting, newspaper publishing, automobile auctions and other businesses. On September 20, 1990, Cox submitted experimental license applications seeking authority to test PCS in New York and San Diego. Cox was the first company with cable television interests to apply for

^{1/} See Personal Communications Services, 7 FCC Rcd 5676 (1992) (hereinafter "Notice"). Cox limits the scope of its comments to the proposals contained in the Notice that address the 2 GHz PCS allocation and licensing process.

and receive authorization for PCS testing. These applications were the first that proposed serious study of the integration of PCS and cable television facilities.^{2/}

In the course of its study of PCS, Cox articulated three concepts that are pivotal to the long term development of PCS. First, use of the existing broadband capabilities of the cable television infrastructure allows efficient interconnection of the numerous microcells required for PCS. Cable offers a communications network that can enhance frequency reuse and permit more effective use of spectrum resources by virtually eliminating the need for fixed microwave spectrum to link microcells. Second, use of cable infrastructure may permit moving expensive modulation electronics to centralized locations, permitting faster deployment and lower cost service.^{3/} Finally, use of distributed antennas on cable will allow flexibility to alter cell sizes and locations, providing coverage for areas that might otherwise be dead zones.

Beyond placing these concepts in the public realm, Cox has performed extensive propagation, voice and data testing integrated with cable television infrastructure to confirm their viability. Cox has demonstrated that broadband cable television facilities (co-axial, fiber optic and hybrid facilities) are well suited to simultaneously carry PCS signals and cable programming. Cox is

^{2/} Long before the submission of its experimental license applications, Cox studied the Personal Communications Networks licensed in the United Kingdom and their application to the United States telecommunications environment.

^{3/} By centralizing modulation equipment at the cable headend, the cable plant functions as an extension of the radio link that transports the modulated signal to and from the cable television headend, likely lowering the cost of system electronics.

continuing its tests and evaluation of PCS as a mass market communications service in its San Diego PCS testbed. Further tests are planned for New York when the necessary prototype equipment becomes available.

PCS holds great promise as a vehicle to introduce an alternative telecommunications service to the residential market. While Cox is enthusiastic about this prospect, the decisions the Commission will make regarding spectrum allocation, market size and licensee selection will have a profound effect on whether this potential will be realized.

A decade ago the Commission stated that "[t]he key to local exchange substitutability in any practical sense is the availability of an inexpensive handheld portable unit that is light in weight. Until such an inexpensive unit is available, cellular service cannot realistically serve as a meaningful replacement for local wireline exchange service."^{4/} PCS can provide inexpensive lightweight portable service as the basis of local exchange competition. This will only be possible, however, if the Commission orients its policies towards encouraging eventual head-to-head competition in the provision of telecommunications services with the monopoly local telephone companies. It is critical that the Commission's PCS proceeding creates an environment where such competition can be nurtured.

^{4/} Cellular Communications Systems, 86 FCC 2d 469, 484 (1981) (concluding that cellular services would not provide competition to local exchange carriers in the near future).

Fashioning a regulatory regime in which PCS is positioned primarily to be a competitor to existing cellular service providers will fail to achieve these goals. Under the proposals contained in the Notice, PCS may provide some services that are similar and will compete with the portable services already offered by cellular providers but more likely will not provide the same high power vehicular services capable of high speed handoff. In Cox's view, PCS will be suited to provide excellent portable, pedestrian service. Because these market needs will differ, network designs for PCS may be very unlike those of cellular operators.

Cox envisions PCS as a service capable of more than merely competing with the portable segment of the cellular market. Rather than encouraging the development of additional high power cellular look-alike systems to compete with cellular, the Commission will have a more lasting positive impact and make better use of the scarce spectrum resource by fashioning what is now technically achievable -- radio-based competition by alternative providers to the landline exchange.

II. SPECTRUM ALLOCATION ISSUES

A. Number of PCS Licensees

The Notice tentatively concludes that 90 MHz of spectrum in the 1850-1990 MHz band should be divided among three PCS providers per market. The remaining 50 MHz of spectrum would be used for unlicensed operations or

to accommodate some of the existing microwave operators that cannot be relocated to higher frequency bands.^{5/}

The proposal for three licensed PCS providers per market is a balance between the Commission's desire to inject the greatest number of competitors into the market and the Commission's recognition that splitting a finite amount of spectrum between many operators may preclude any of them from developing a competitive service because of insufficient spectrum assignments.^{6/} Cox agrees that there should be competition among PCS providers. The Commission should license the number of competitors that the market can support consistent with efficient use of spectrum.

In pursuing the its goal of competition, the Commission must recognize that licensing too many PCS providers could undermine the viability of the new service. The recent experience in the United Kingdom offers an insight into the consequences of creating too much supply for too little demand. In 1989, the British Department of Trade and Industry awarded nationwide CT-2 licenses to four competing providers. Despite the widespread predictions of great public demand, all but one of the four initial licensees had abandoned construction and expansion their CT-2 operations within three years. The fourth licensee was sold prior to commencing initial service. While a number of marketing, technical and regulatory factors contributed to the initial failure of CT-2 in Britain, the

5/ As discussed infra, Cox is opposed to assigning any portion of the PCS spectrum to LECs as a set aside for their development of a wireless local loop.

6/ Notice at 5690.

government's decision to license four competing providers in a new and untested service was certainly a significant factor. Thus, the United Kingdom's CT-2 experience suggests that maximizing the number of competing providers is not always the best approach in licensing new telecommunications services.

B. Each PCS Licensee Should Have Enough Spectrum to Compete with Existing Telecommunications Services

It is critical for the development of PCS that each licensee be assigned sufficient spectrum to satisfy consumer demands and to enable PCS providers to compete effectively. Cox believes that 40 MHz per licensee is the minimum amount of spectrum necessary to begin to offer a competitive wireless local loop service and to meet consumer demand, with appropriate accommodations for access to additional spectrum for those PCS providers who can demonstrate that their particular 40 MHz block is so congested with fixed microwave operators that the PCS provider is capacity constrained.^{7/} This 40 MHz minimum figure takes into account the need to design PCS systems to accommodate sharing and co-existence with wideband government microwave

^{7/} An important consideration in determining the amount of spectrum necessary for each provider is the recognition that PCS can provide radio-based intermodal competition to landline services. Cox notes that the latest Bellcore Technical Advisory focusing on PCS as a wireless local loop suggests that 60 MHz of spectrum would be required for a single provider of a low power PCS voice and low speed data network, with more bandwidth required as use becomes widespread. See Bellcore Technical Advisory TA-NWT-001313, Issue 1, July 1992 at 15-16. Bellcore's analysis appears to assume clear spectrum in the entire 60 MHz band.

licensees in the 2 GHz band that will be exempt from relocation under the Commission's rules.^{8/}

The Notice largely bases its 30 MHz per carrier assignment proposal on the need to provide PCS carriers an amount of spectrum comparable with the 25 MHz assigned to each cellular carrier.^{9/} Yet, the Notice also recognizes that block assignments of 40 MHz per licensee would provide PCS licensees greater capacity and flexibility to develop new services and to compete with other telecommunications services providers. The relevant question is not how much spectrum cellular providers have but how much spectrum PCS operators need to enable them to provide a true local exchange alternative.

The Notice properly recognizes that sufficient spectrum must be available to each PCS provider to enable the development of competitive services.^{10/} Cox believes that comparing the spectrum needs of PCS to the cellular baseline of 25 MHz of clear spectrum per licensee unduly constrains the long-term prospect of PCS to become a local loop alternative.^{11/} The Commission should focus instead on assuring each PCS licensee an adequate amount of

8/ See Emerging Technologies, FCC 92-437, ET Docket No. 92-9 released October 16, 1992 at ¶ 26.

9/ Notice at 5691.

10/ Id.

11/ It may be appropriate, for example, to consider that landline telephone conversation holding time is longer than that for cellular. Any PCS system designed to provide landline equivalent service would need more spectrum capacity to account for this difference.

spectrum to have the capacity and flexibility envisioned by the Notice to compete for local exchange traffic.

A major obstacle to realizing this minimum amount of clear spectrum for each PCS licensee, however, is the presence of an appreciable number of microwave licensees in the 1850-1990 MHz band in most major metropolitan areas. Under the Commission's rules adopted in the Emerging Technologies proceeding, all public safety and special emergency radio services licensees (state and local government, police, fire and medical emergency communications) will be grandfathered. As such, they never can be required to relocate to accommodate the development and growth of PCS.

Cox's frequency coordination undertaken in its PCS experimental license activities in San Diego shows that over 50% of the 108 microwave licensees in the 1850-1990 MHz band within 75 miles of San Diego are public safety and special emergency entities. Of these licensees 96% have 10 MHz allocations.^{12/} These licensees are spread throughout the band, with the major concentration above and below the 1910-1930 MHz band proposed for unlicensed PCS.

The presence of these microwave licensees has a profound effect on the amount of spectrum required for a single PCS licensee to provide service. Assuming that in some geographic areas of potential interference there are two

^{12/} Information provided by Comsearch to Cox suggests that 94% of all 1850-1990 MHz microwave licensees nationwide are authorized to transmit a 10 MHz bandwidth.

10 MHz wideband microwave licensees, it could be impossible for a PCS licensee to provide service because of its inability to select a non-interfering frequency within its assigned spectrum block. Failure to assign sufficient spectrum to deal with this possibility could block the development of PCS.

Cox is concerned that the proposed 30 MHz assignment per licensee may unduly complicate the clearing of the 1850-1990 MHz band of those microwave users that can be relocated under the Commission's Rules. For example, with an assignment of 15 MHz up and 15 MHz down, a 10 MHz microwave assignment could fall equally between two spectrum blocks (i.e., 5 MHz in Block A and 5 MHz in Block B). Relocation of the microwave licensee could be stalled if PCS competitors are not willing to cooperate by negotiating with the microwave licensee and sharing the relocation costs. Allocation of PCS in 40 MHz minimum blocks will more closely match the 10 MHz assignment scheme that is common for microwave licensees.

The heavy concentration of microwave licensees exempt from relocation and the amount of spectrum they use must be taken into account in determining adequate PCS spectrum assignments. Cox's analysis suggests that larger spectrum blocks of 40 MHz minimum will be necessary to cope with the situation where much of the spectrum to be assigned to PCS licensees cannot be assumed to be available. Further, the Commission should designate a "spectrum reserve" for PCS licensees to draw on should their assigned spectrum be overly congested.

The Notice does not address whether the Commission intends to modify a PCS block assignment to provide a severely spectrum constrained PCS licensee access to additional spectrum, either in order to equalize assignments among PCS providers or to account for the difference in the amount of clear spectrum available to other telecommunications providers. Cox proposes that equal block assignments among PCS providers be maintained, but that spectrum constrained providers be given access as needed to a PCS spectrum reserve consisting of all unassigned spectrum in the 1850-1990 MHz band.^{13/} The spectrum reserve would be available to PCS licensees who can demonstrate that initial service or expansion of service is impossible because of the presence of co-channel microwave licensees.

This reserve spectrum would be relinquished by the PCS licensee at the time a microwave user relocates to a higher band, an alternative medium, or otherwise surrenders its license, thereby enabling the PCS provider to utilize the vacated frequencies within its assigned block. Once the spectrum reserve is no longer needed, the Commission could consider other options for its use, including the incremental assignment of the reserve spectrum to a PCS provider when it demonstrates exhaustion of its assignment or the licensing of an additional PCS provider.

^{13/} This reserve spectrum, of course, also will be limited in its availability due to the presence of microwave licensees.

C. Major Trading Areas Are Appropriate Markets for
PCS Licensing

The Notice presents several options for initial licensing of PCS markets. The Notice evaluates the advantages and disadvantages associated with licensing PCS providers for national, regional, LATA-wide and more local service areas.^{14/} Cox supports licensing PCS on a Major Trading Area ("MTA") basis.

The Commission cannot seriously credit the argument that nationwide PCS licensing is justified by empowering a single entity to dictate standards for nationwide interoperability, roaming and other services on an integrated basis.^{15/} Cox recognizes the Commission's concern that PCS operators arrive at interoperability and roaming standards quickly. However, that concern does not support licensing even a single nationwide service provider.^{16/} Rather, appropriate standards for intersystem coordination need to be established by technical standards organizations under the direction and timetable set by the Commission. As discussed in Section VII, these standards should be uniform among all the spectrum allocated for PCS.

^{14/} Notice at 5699-5701.

^{15/} Cox also does not believe there is any merit to the argument that award of national licenses will assist U.S. companies to compete in foreign markets. In fact, MTA-based licensing will create a broader base of American companies that will innovate and market successful products and services internationally.

^{16/} Although Cox does not support any allocation for ubiquitous nationwide networks, it does not oppose the "Extended Network PCS" concept recommended by dbX Corporation in this proceeding.

Cox believes that the MTA licensing proposal offers the best balance between PCS markets too small to achieve competitive service offerings and interoperability standards; yet not too large to accommodate a diverse group of PCS licensees. MTAs also closely match current consolidated cellular regions that grew to regional and supraregional systems in response to customer demand for wide areas of mobility. This is an important factor since a large area of coverage and seamless service within the "home market" of a single carrier likely is what consumers will want and demand of PCS providers. MTAs have the added advantage of permitting PCS licensees to realize economies of scale and scope similar to those present in both the landline and cellular networks.

MTAs will permit faster deployment of service than a nationwide license area. In the first few years of service deployment a nationwide licensee could provide service only to a fraction of the nation. MTA-based licensees will be better situated to build networks covering more of their market more quickly.

Licensing PCS on a LATA-wide basis or on a Basic Trading Area or other basis will disadvantage PCS licensees by overly fragmenting the licensing process and licensing areas. Cox agrees with the Notice that smaller licensing areas will result in numerous unnecessary, time-consuming and expensive license transfer transactions from the likely consolidation of these smaller markets. If the Commission adopts strict anti-trafficking rules, many of these smaller markets may never be built.

The Notice correctly observes that licensing large areas will minimize unproductive costs and delay. Since the cost of consolidation must

ultimately be reflected in the cost of service, it is the PCS customer that will pay for these essentially unproductive transactions. Further, the experience of cellular, paging and SMR demonstrates that demand for all forms of mobile services continues to grow on a regionwide basis. Cox therefore urges the Commission to license PCS on an MTA basis.

D. Licensing PCS Spectrum Blocks on a Non-uniform Basis Creates Inequities

Among the Notice's licensing options is the assignment of spectrum blocks divided according to non-uniform market sizes, i.e., a nationwide and two regional block assignments. Cox opposes such a licensing scheme because it places all non-national competitors at a significant competitive disadvantage. A carrier able to provide nationwide service on an integrated basis has a clear marketing advantage over all regional or local providers.

The Commission should avoid handicapping PCS licensees by setting non-uniform market sizes at the time of initial licensing. It is essential that each PCS licensee start off on an equal footing and allow either consolidation or modification of market sizes to achieve market economies as customer demand may dictate.

E. Relocation Negotiations Must Balance Legitimate Interests of Existing Users With The Need to Deploy PCS Expeditiously

The Notice solicits comments on ground rules for negotiations between PCS licensees and existing microwave licensees for their relocation to higher frequencies. Cox submits that the parameters to be established by the

Commission on relocation negotiations can assist in the quick deployment of PCS while not adversely affecting the operations of incumbent microwave users.

Cox and other entities interested in providing PCS have expressed their willingness to pay the relevant costs of microwave licensee relocation and to assure that incumbent microwave users are relocated to frequencies that permit their continued operation at comparable service levels. However, Cox is concerned that Commission negotiation rules not serve to stall the development of PCS. Cox's proposal to have a spectrum reserve is one way to permit a more rapid PCS rollout while accommodating those microwave licensees grandfathered or pending relocation.

The Notice also solicits comment on the appropriateness of previously adopted standards in other radio services for reimbursement of relocation costs.^{17/} It is eminently reasonable to limit reimbursement of microwave licensees to their costs of relocation, particularly if the Commission wants the public to have access to new PCS services. Cox believes that the standards the Commission adopted for involuntary ITFS licensee relocation in the case of Multichannel Multipoint Distribution Services ("MMDS") are appropriate standards that should be used for both voluntary relocation negotiations and involuntary relocation requests.^{18/}

17/ Notice at 5695.

18/ Amendment of Parts 21, 43, 74, 78 and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands, 6 FCC Rcd 6792, 6798-99 (1991).

The Utilities Telecommunications Council's original proposal of a ten year voluntary negotiation period is completely unworkable. The crowded microwave frequency situation in many metropolitan areas makes it imperative that PCS licensees receive large blocks of spectrum to account for the large number of existing interference protected users. In San Diego, for example, a PCS licensee is already permanently foreclosed from relocating over 50% of the existing microwave licensees. This puts pressure on the PCS licensee to relocate other, non-exempt microwave licensees relatively quickly after the PCS license is issued in order to provide any service at all. A reasonable and workable solution would permit the PCS licensee to request microwave licensees to relocate within twelve months.^{19/}

F. Negotiations Should Only Be Permitted Between the PCS Licensee and the Microwave Licensee to Avoid Speculation or Profiteering on "Relocation Options"

Cox urges the Commission to consider anti-speculation rules for voluntary relocation negotiations addressing the possibility that third parties might attempt to create a market for "relocation options." It is apparent that some parties have already approached utilities, municipalities and other microwave licensees with relocation offers, prior to any Commission action on voluntary negotiations, PCS market structure, or spectrum block assignments and award of licenses.

^{19/} Given the likely amount of time before the PCS rules are adopted and applications filed and granted, Cox believes that this twelve month notification period is consistent with the three year transition period proposed by the Commission in the Emerging Technologies proceeding.

Cox supports legitimate entrepreneurial activity. The commencement of relocation negotiations, however, suggests that many hope to achieve windfalls by reselling relocation options to those ultimately selected as PCS licensees. Such rampant speculation should be expressly prohibited by the Commission. It will only complicate and delay the relocation process. It will create additional unnecessary expenses for the PCS licensee that will have to be passed onto customers as added service costs. There is no public policy reason to permit relocation negotiations to increase the cost of initiating PCS service.

III. PCS LICENSE SELECTION

A. PCS Competition Cannot Be Enhanced by Allowing LECs Access to PCS Spectrum

Because competition is one of the main policy goals espoused by the Commission for PCS, policies must be developed that make competition possible. This includes adoption of licensee eligibility standards that preclude LECs from qualifying to hold PCS spectrum in the same area where they or an affiliate are the landline telephone service provider.^{20/} Failure to adopt such a policy at this early stage in the development of PCS will foreclose the potential of PCS to expand competition into the last bastion of monopoly telecommunications.

LECs have a clear vested interest in maintaining control of a monopoly local exchange. Granting LECs access to PCS spectrum takes available spectrum away from other potential PCS providers who will compete with the

^{20/} Cox proposes no restriction on LEC eligibility for PCS spectrum where the LEC is not also the local telephone service provider.

LEC local exchange. A LEC assignment of scarce PCS spectrum will do nothing to advance competition.

There is Commission precedent for foreclosing an existing competitor from acquiring communications facilities or spectrum where such an action would not enhance competition. The most recent example is the Commission's enforcement of the Cable Act's prohibition on LECs' acquisition of existing cable systems. In the Video Dial Tone proceeding the Commission reasoned that LEC acquisition of an existing in-market cable operator, the only widespread source of video delivery infrastructure, would not enhance competition.^{21/}

The Commission also concluded recently that its pro-competitive aims would not be achieved by permitting cable operators to apply for "wireless cable" licenses within their cable markets. The Commission reasoned that MMDS was meant to compete directly with cable and allowing cable operators to become MMDS licensees would not enhance the prospects of head-to-head wireless cable/cable competition.^{22/}

The case for prohibiting LECs from providing PCS within their landline exchange areas is much stronger here, because PCS providers will be

^{21/} See Telephone Company-Cable Television Cross-Ownership Rules, 7 FCC Rcd 5781, 5837-8 (1992).

^{22/} Amendment of Parts 21, 43, 74, 78 and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands, Report and Order, 5 FCC Rcd 6410, 6416-17 (1990); Order on Reconsideration, 6 FCC Rcd 6764, 6775-76 (1991).

dependent upon the landline LEC essential facilities, advanced intelligent network functions and interconnection to offer their services. The LECs' tremendous monopoly advantage does not stop with bottleneck features. LECs have unparalleled access to all telephone customers, proprietary information regarding network usage of these customers, and control over the distribution and assignment of telephone numbers. In contrast, new PCS providers will be entering the market with no customer base or control of essential interconnection facilities and functions. They will introduce competition to a market devoid of competitive alternatives.

The promulgation of effective ground rules to police this challenging transition is critical to the establishment of local competition. To this end, the Commission only can ensure that LECs will not discriminate and cross-subsidize to foreclose competition from PCS providers if LECs are prevented from doing so by regulations which recognize their bottleneck and the incentives it creates. Clearly, the most effective deterrent to anti-competitive conduct by LECs is to preclude them from holding a PCS license.

B. LEC Affiliated Cellular Operators Should Not Be Eligible for PCS Licenses

The Notice requests comment on the competitive impact of allowing cellular operators to acquire PCS spectrum in markets where they already provide cellular service. In Cox's view, wireline cellular eligibility for PCS spectrum in markets where the wireline cellular operator is affiliated with the landline telephone company will likely foreclose any prospect for the cellular operator to

assist in developing local exchange competition. Because the wireline cellular operator is an affiliate of the landline telephone company, it will not provide services that compete directly with the local loop. Since LEC-affiliated cellular does not have the incentive to develop PCS to its full potential as a local exchange competitor, it would waste scarce PCS spectrum to permit LEC cellular to be PCS licensees and would fail to promote the Commission's goals.

The incorrect assumption pervading the analysis of eligibility in the Notice is that PCS is nothing more than digital cellular, and that it will be directly competitive with current cellular service. Cox does not share this view and believes the Commission will have lost an unparalleled opportunity to create competition in the local exchange where none currently exists by adopting eligibility rules for PCS that reflect only a cellular competition view. Adoption of appropriate eligibility rules would encourage competition by all non-monopoly affiliated carriers directed towards the elimination of the monopoly position of the LEC in the local loop.

IV. PROPOSALS FOR LEC LICENSING AS PCS PROVIDERS ARE NOT IN THE PUBLIC INTEREST

A. The Commission Should Ensure Full and Fair Competition

Non-structural safeguards do not work. For example, both the Georgia and Louisiana public utility commissions have found evidence of pervasive BellSouth cross-subsidies. The Louisiana PSC is mired in litigation over the correctness of its audits.

Cox submits that the value of asserted economies of scope of PCS to a LEC are illusory. First, the common technical skills to be shared between the landline and wireless telecommunications divisions are not obvious. While there would undoubtedly be greater economies of scope if the PCS and cellular operations of a LEC were combined in one subsidiary, no one seriously suggests that it be permitted. Second, the marginal savings of a combined landline/PCS sales force are not likely to be significant.

As a potential competitor to the local exchange, PCS represents a threat to monopoly revenues. Thus, LECs cannot reasonably be expected to support the development of independent PCS systems. Once competition is established, it is not unreasonable for LECs to use their local loop facilities and unlicensed Part 15 PCS spectrum to compete with PCS systems, but the Commission must be diligent to ensure that the LECs not use their monopoly position to strangle competition. Unfair competitive advantages have their greatest effect during the early stages of industry development.

B. Assigning LECs 10 MHz as a "Wireless Tail" to the Landline Network Is an Unjustified Spectrum Set-Aside

Cox opposes the suggestion in the Notice that LECs, even if otherwise excluded from PCS license eligibility for all the reasons Cox has provided, should be considered for a PCS spectrum assignment of 10 MHz to allow their provision of a "wireless tail" to the LEC landline network. Cox believes that the assignment of PCS spectrum to the LEC would be contrary to the public interest because it will not enhance competition and deprives other